## § 73.28

§§ 73.25 and 73.26 shall immediately conduct a trace investigation of any shipment that is lost or unaccounted for after the estimated arrival time and file a report with the Commission as specified in § 73.71.

[44 FR 68192, Nov. 28, 1979, as amended at 67 FR 3586, Jan. 25, 2002; 68 FR 14530, Mar. 26, 2003; 68 FR 23575, May 5, 2003; 74 FR 62684, Dec. 1, 2009]

## § 73.28 Security background checks for secure transfer of nuclear materials.

Licensees are excepted from the security background check provisions in Section 170I of the AEA if they have not received Orders from the Nuclear Regulatory Commission containing requirements for background checks for trustworthiness and reliability that include fingerprinting and criminal history record checks as a prerequisite for unescorted access to radioactive materials.

[72 FR 3027, Jan. 24, 2007]

## § 73.35 Requirements for physical protection of irradiated reactor fuel (100 grams or less) in transit.

Each licensee who transports, or delivers to a carrier for transport, in a single shipment, a quantity of irradiated reactor fuel weighing 100 grams (0.22 pounds) or less in net weight of irradiated fuel, exclusive of cladding or other structural or packaging material, which has a total external radiation dose rate in excess of 1 Gray (100 rad) per hour at a distance of 1 meter (3.3 feet) from any accessible surface without intervening shielding, shall follow the physical protection requirements for category 1 quantities of radioactive material in subpart D of part 37 of this chapter.

[78 FR 17021, Mar. 19, 2013]

## § 73.37 Requirements for physical protection of irradiated reactor fuel in transit.

(a) Performance objectives. (1) Each licensee who transports, or delivers to a carrier for transport, in a single shipment, a quantity of irradiated reactor

fuel¹ in excess of 100 grams (0.22 lbs) in net weight of irradiated fuel, exclusive of cladding or other structural or packaging material, which has a total external radiation dose rate in excess of 1 Gy (100 rad) per hour at a distance of 1 meter (3.3 feet) from any accessible surface without intervening shielding, shall establish and maintain, or make arrangements for, and assure the proper implementation of, a physical protection system for shipments of such material that will achieve the following objectives:

- (i) Minimize the potential for theft, diversion, or radiological sabotage of spent nuclear fuel shipments; and
- (ii) Facilitate the location and recovery of spent nuclear fuel shipments that may have come under the control of unauthorized persons.
- (2) To achieve these objectives, the physical protection system shall:
- (i) Provide for early detection and assessment of attempts to gain unauthorized access to, or control over, spent nuclear fuel shipments;
- (ii) Delay and impede attempts at theft, diversion, or radiological sabotage of spent nuclear fuel shipments; and
- (iii) Provide for notification to the appropriate response forces of any attempts at theft, diversion, or radiological sabotage of a spent nuclear fuel shipment.
- (b) General requirements. To achieve the performance objectives of paragraph (a) of this section, a physical protection system established and maintained, or arranged for, by the licensee shall include the following elements:
- (1) Preplan and coordinate spent nuclear fuel shipments. Each licensee shall:
- (i) Ensure that each armed escort, as defined in §73.2, is instructed on the use of force sufficient to counter the force directed at the person, including the use of deadly force when the armed escort has a reasonable belief that the use of deadly force is necessary in self-defense or in the defense of others, or any other circumstances, as authorized by applicable Federal and State laws.

<sup>&</sup>lt;sup>1</sup>For purposes of 10 CFR 73.37, the terms "irradiated reactor fuel" and "spent nuclear fuel" are used interchangeably.